A7 MILLER ENGINEERS SCIENTISTS



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June 13, 2006

JUN 2 0 2006

Paula Natural Resource Technology 23713 West Paul Road Unit D Pewaukee, WI 53072

Subject:

Lab Accreditation for Miller Engineer & Scientists

Sheboygan, Wisconsin

Dear Paula:

J. Roger Miller & Associates, Inc., doing business as Miller Engineers & Scientists (Miller), has been recognized as recently as 2004 by the Wisconsin Department of Transportation (WDOT) as a certified laboratory for materials testing on WDOT projects. Miller no longer carries the WDOT lab certification for business reasons. Miller employs qualified technicians and engineers to work on projects that require soils, aggregate and concrete laboratory testing services.

Per Wisconsin Laboratory Qualifications requirements, we hereby state the following:

- All personnel doing acceptance testing are qualified to perform the specific test.
- All tests are performed in accordance with the applicable ASTM test procedure.
- We have completed a Laboratory Manual, which includes information about our organization, facilities, sample control, test procedures, inspections, reporting and internal quality system reviews. A copy of the Laboratory Manual is kept in our office at all times.
- Our laboratory equipment is well maintained and calibrated.
- We are capable of performing the tests you are requesting.
- Documentation of all material test results at project labs will be neat, accurate and made readily accessible to all authorized individuals.

If you should have any questions, please contact the undersigned by phone at (920) 458-6164 or by fax at (920) 458-0369.

Sincerely,

MILLER ENGINEERS & SCIENTISTS

Brian J. Leibham Laboratory Manager Peter G. Pittner, MS Vice President

Enclosure:

Summary of Testing Capabilities

WisDot Certification of Qualification

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5308 S 12th Street

Sheboygan, WI 53081-8099

Phone (920) 458-6164

Fax (920) 458-0369

Summary of Testing Capabilities

Method

I. Soil/Aggregate Testing

Absorption	ASTM C97/C67
Atterberg Limits (LL and PL combined)	ASTM D4318
Chert Content of Gravel Aggregate	
Consolidation Test (with time compression readings)	ASTM D2435
Consolidation Test (without time compression readin	gs) ASTM D2435
Constant Head Permeability, Granular Soil	ASTM D2434
Density (from Shelby Tube, including Moisture Cont	ent) ASTM D2937
Flexible Wall Permeability, Cohesive Soil	ASTM D5084
Hydrometer plus Washed Sieve (Gradation Analysis)	
Insoluble Residue (excluding Washed Sieve)	
Moisture Content	ASTM D2216
No. 200 Washed Sieve Analysis	ASTM D1140/C117
Proctor (Clays, Silts, & Coarse Gravel)	ASTM D698/D1557
Proctor (Sands & Gravel)	ASTM D698/D1557
Sieve Analysis (dry)	ASTM D422/C136
Sieve Analysis (washed)	ASTM D422/C117/C136
Specific Gravity	ASTM D854/C127
Visual Classification	ASTM D2487/D2488
Unconfined Compression Strength	ASTM D2166

II. Materials Testing

Asphalt Extraction/Aggregate Gradation	ASTM D2172/C136
Asphalt Extraction/Aggregate Gradation plus Asphalt	
Content Determination	ASTM D2172/C136
Content Determination	A GTD 4 G20/G7100
Compression Test of Concrete Cylinder or Cube	ASTM C39/C780
"Hold" Cylinder (handled and cured but not tested)	



I. Soil/Aggregate Testing

	% Saturation	ASTM D2937
	California Bearing Ratio Strength	
	Cation Exchange Capacity	
	Cohesive Soil Permeability (by one-dimensional consolidation)	
	Constant Head Permeability, Cohesive Soil	
	Direct Shear Strength	
	Falling Head Permeability	
	Field Capacity	
	Fractured Face Count	
	Minimum Resistivity	
	Moisture-Penetration Relation Strength	
	Organic Matter	ASTM D2974
	pH	ASTM D4972
	Porosity	ASTM D2937
	Potential Reactivity of Aggregate	
	Sand Equivalent (3 determinations)	
	Shrinkage Factors	
	Sodium Adsorption Ratio	
	Specific Gravity and Unit Weight	
	Swell Test	
	Triaxial Compression Strength (Consolidated or Unconsolidated,	
	Undrained or Drained, with Pore Pressure Measurements)	ASTM D2850
	Unit Weight and Voids in Aggregates	
	Water Soluble Sulfate	A.S.A. Method 10-3.7
	Witter Soldore Sulfate IIII	
П.	Materials Testing	
	-	
	Absorption Test of Brick or Building Block	ASTM C140
	Bulk Density of Asphalt, Saturated Surface Dry	ASTM D2726
	Compression Strength of Asphalt	ASTM D1074
	Compression Test (Brick/Masonry Units)	ASTM C67/C140
	Marshall Mix Design	ASTM D1559
	Measurement of Dimensions of Brick or Building Block	ASTM C140
	Modulus of Rupture	ASTM C67
	Moisture Content on Building Block	ASTM C140
	Specific Gravity, Absorption and Voids in Hardened Concrete	ASTM C642
	Splitting Tensile Strength of Concrete Cylinder	ASTM C496
	Stability and Plastic Flow of Bituminous Materials (Marshall Test)	ASTM D1559
	Theoretical Maximum Specific Gravity of Bituminous Paving Mixtures	ASTM D2041
	Unit Weight of Concrete Cylinders and Cores (air dry)	
	Water Effect on Cohesion of Asphalt	ASTM D1075

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Effective Date: January 1, 2004
Expiration Date: December 31, 2004

Wisconsin Department of Transportation Certificate of Zualification

This is to signify that

MILLER ENGINEERS & SCIENTISTS - SHEBOYGAN

requirements set forth by the Wiscousin Laboratory Zualification Frogram for the sampling and Laboratory and personnel have been found to be qualified to conduct acceptance sampling and testing of materials for WisDOT National Highway System projects and have met the testing of:

General Items: T238.

Concrete Mix: 122, 1231, 123.

John B. Ouhn

Chief Quality Management Engineer

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Director Eureau of Highway Construction